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ABSTRACT

A unifying set of pedagogical criteria which would establish an objective basis for a staff development needs assessment is outlined. Generic teaching skills are identified: diagnosis, prescription, classroom management, use of instructional materials and resources, and human relations. Specific skills in the instruction of mathematics, reading, and oral communication are presented. Sample evaluation forms for each of the generic teaching skills are included. (JD)

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A FRAMEWORK FOR STAFF DEVELOPMENT NEEDS ASSESSMENT

Occasional Paper Number 4

Office of Staff Development
William E. Webster, Director

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CALIFORNIA STATE DEPARTMENT OF EDUCATION
Wilson Riles, Superintendent of Public Instruction
Sacramento, 1978

SP013 117

Introduction

Throughout California and nationally a groundswell of interest and support for staff development programs for school personnel is building. Categorical aid programs have typically required a staff development component. The federal Teacher Center legislation and the revised legislation for the federal Teacher Corps Program both reflect a higher level of concern for staff development. In California, both the school improvement effort and the staff development bill (AB 551, 1977) indicate the realization on the part of legislators and a number of school-related constituencies that continuing training for school personnel must be provided for.

Invariably, the concept of needs assessment is imbedded either in the legislation itself, or in regulations, or in project selection procedures. There is a growing need to be able to identify areas for strengthening the effectiveness of the practitioners of instruction, and to relate these needs to the unmet needs of the students served by the practitioners. For the most part, needs assessments for staff development purposes have been limited to asking people what they need; this is tantamount to asking what they want from among the things that they already know about. There has been no unifying set of pedagogical criteria which would tend to establish an objective basis for a staff development needs assessment.

This paper is offered to partially fill the gap; instructional personnel may find the contents useful as they conceptualize the process of identifying unmet needs for staff development purposes. Some of the assumptions underlying this paper are:

1. a standardized vocabulary of teaching and learning is desirable;

2. having information is essential to understanding and understanding is a prerequisite to successful application of knowledge;

3. what works for people in schools will work even better if they understand why it works;

4. generic teaching competencies are applicable across all age levels and content areas;

5. in addition to specialized knowledge, each skill area or subject matter discipline requires some unique teaching competencies; and

6. every practitioner of instruction, however effective, can improve.

It is hoped that county office staff, school district staff, and school site groups will find the document helpful in establishing a framework for determining what knowledge and what skills can be strengthened so that instructional objectives for the students can be realized.

Carl M. Schmitthausler, Consultant
Staff Development Programs

Generic Teaching Skills

The competency-based teacher education movement in the last ten years has produced untold numbers of lists of desirable teaching behaviors. As teaching has been studied, observed, and analyzed, some important conceptual milestones have been reached and passed. Whereas learning theory has traditionally been within the domain of educational psychologists and has usually been studied, written about, and taught in isolation from the more practical aspects of teacher education, there is now a healthy trend to develop theories of teaching with learning theory as a foundation.

The advent of Bloom taxonomies lent momentum to this movement and to the efforts to look at teaching as behavior. The conventional wisdom among teacher educators incorporates, at least to a degree, the assumptions that knowledge of pedagogy and understanding of the learning theory should lead to competencies. The ability to translate the knowledge into specific, planned behaviors, based on a rationale which ties the behaviors back to the nature of the learner is the bottom line in teaching.

Generic teaching skills are felt to be applicable across age/grade levels and curriculum areas. These skills may be viewed as a personal behavior management system for practitioners of instruction. When practiced to the point of habituation, there is the expectation that these skills will enhance the effectiveness of teachers.

The list of generic teaching skills which follows is incomplete. The skills listed are illustrative. Some are capable of being divided into subsets of skills. The possibilities of adding to the lists seem limitless. However, for any school site group which is addressing itself to the opportunity for further professional development, this basic list can provide the foundation for self analysis, for peer feedback and for clinical observation and support.

There is strong evidence that neither age, nor the number of years in teaching are impediments to continued growth in effectiveness. When instructional professionals become convinced that new knowledge translated into new (or improved) behaviors will help meet instructional goals for students, most are eager to learn. There is compelling evidence that classroom teachers learn from each other, and that building administrators who demonstrate and model knowledge about teaching win trust and respect.

Therefore, the list of generic teaching skills which follows is recommended as a point of departure for school staff which seek to find ways to strengthen effectiveness in the classroom.

Knowledge ——→ Understanding ——→ Application

GENERIC TEACHING SKILLS

To be used as a Framework for Assessing Staff Development Needs at Local School Sites

Appropriate to the ages of the learners, the special needs categories of groups of learners (LES/NES, Disadvantaged, Gifted and Talented, Handicapped), and the Skill or content area, the Teacher demonstrates consistently the ability to:

Diagnostic Skills	Prescriptive Skills	Classroom Management Skills	Instructional Materials and Resource Skills	Human Relations Skills
develop and administer or select and administer a previously developed diagnostic tool or survey	provide individual or small/whole group instruction based on learning needs and interest	determine and establish classroom expectations and procedures	select and utilize instructional materials and resources related to a long- and short-term objective	use principles of reinforcement to enhance the self-image of the learners
collect, record, analyze, and interpret diagnostic data	select or create appropriate short and long range objectives for the learners	give clear concise directions	select and utilize instructional materials which are at the appropriate developmental level	provide equal attention and response to each student
recognize in individual learners behaviors indicative of physical, mental, or emotional factors which effect learning	develop a sequenced task analysis for short and long range objectives as a basis for instruction	instruct learners how to attend and follow directions	select and utilize varied instructional materials which are multi-sensory	assist learners to find acceptable ways of dealing with their emotions
monitor learner progress during ongoing learning activities	break down short and long term objectives into sequential and manageable steps (task analysis)	monitor and record progress of individual students through an instructional record-keeping system	select and utilize relevant instructional materials which appeal to the interests of learners	express honest mature emotions
evaluate learner achievement at the conclusion of a learning activity	use selected principles of learning as the basis of instruction	plan a series of learning activities so that learners proceed efficiently	select, utilize, and integrate multi-ethnic instructional materials into a variety of curriculum areas	ameliorate hostility and foster understanding among learners
	sequence objectives and learning activities through knowledge, comprehension, application, analysis, synthesis and evaluation levels	arrange the learning environment to be functional and stimulating	create appropriate instructional materials	develop positive feelings toward learning
	utilize specialized support personnel as appropriate (speech liaison, psychologist, etc.)		identify and utilize appropriate resources in the school/community	develop positive feelings toward self and others
				value and cultivate appreciation for the unique personal and cultural qualities of individuals
				develop and maintain productive working relationships with school and district staff, parents and community members

Specialized Teaching Skills

The assumption that certain fundamental teaching skills (generic) underlie any effective teaching does not imply that there are no specialized skills associated with various areas of the curriculum. Following are partial lists of teaching competencies related to specific curricula.

The absence of an area from this inventory means only that developmental work is still going on. The lists presented for oral language development, reading, and mathematics are illustrative. It is expected that ultimately similar lists will be developed for science, social science, music, art, and physical education.

Meanwhile, to assist school staff planning groups to move ahead with the identification of needs for staff development these preliminary lists are presented.

Teaching Skills
Associated with Successful
Oral Language Instruction
(Listening and Speaking)

The following is quoted from "English Language Framework for California Public Schools," 1976; page 21:

> "Oral language is a primary form and the source of all other language forms. From the beginning of humankind's mutally understood "noises" to the development of the electronic dissemination of sound, oral language has been the principal means of communication for all cultures. Although the advent of movable type in the fifteenth century motivated some societies to transfer from an oral tradition to a print culture, the transfer has never been complete. Moreover, after five centuries of print and extraordinary technological advances, the reading and writing skills taught at the secondary level are still not adequately possessed by 40 percent of our population. Although widely different interpretations for this inadequacy are offered by experts, all agree that oral language is the foundation on which reading and writing rest."

The teacher demonstrates consistently the ability to:

- model correct audible speech
- elicit spontaneous speech from students
- elicit paraphrased verbal responses from students when recall or understanding of already presented information is wanted
- use oral language within the range of understanding of students
- elicit, through appropriate questioning, complete verbal expressions based on analysis and synthesis of information and ideas
- provide classroom activities in which task-oriented student-student verbal interaction is encouraged
- introduce, explain, and use words which extend students' expressive vocabulary
- refrain from interrupting students' speech patterns when their verbal responses require thoughtful preparation
- accept and use a student's oral language patterns as a basis of instruction.

Teaching Skills
Associated with Successful
Reading Instruction

Conventional wisdom seems to support the idea that every teacher should be a teacher of reading. Many teachers do not, because of the ages of their students or their particular subject matter specialty, accept a role as teacher of reading. Whether or not it is possible to persuade practicing secondary teachers in general to "buy into" the role, it should be clear that elementary teachers carry a mandate from the society to be effective in teaching students to read.

The list of competencies which follows is felt to be illustrative of behaviors which an effective teacher will use consistently as a teacher of reading. One might argue that there is a degree of overlap with the list of "generic" skills. The argument may be academic since, one way or another, the objective is to assure that teachers have the opportunity to develop the skills.

The teacher demonstrates consistently the ability to:

- identify pre-reading (reading readiness) skills
- identify word analysis skills
- identify vocabulary skills
- identify comprehension skills
- identify skills peculiar to a content area
- identify speed and flexibility skills
- identify oral reading skills
- perform a complete task analysis to establish a sequence for teaching a given skill or skills
- develop reading continuum based on a sequence of skills
- develop or adopt a classroom reading program with instruction focused on diagnosis of individual students' skill levels
- successfully assist pupils to read functionally by the transfer, utilization, and refinement of reading skills
- assist students in the selection of reading materials related to their interests, at appropriate levels of difficulty
- model expressive oral reading techniques using materials which will capture student interest
- select stimulating materials for students' use in practicing oral reading

Teaching Skills
Associated with Successful
Mathematics Instruction

This quotation from "Mathematics Framework for California Public Schools," 1975, page 1 makes the point that effective mathematics teachers must possess special knowledge, understanding, and skills:

> "The recommendations of the revised framework for kindergarten through grade eight reflect the following changes in emphasis:
>
> 1. An increased emphasis on the application of mathematical concepts to physical objects familiar to children
> 2. An increased emphasis on computational skills along with the development of the structural aspects of mathematics
> 3. An increased emphasis on ways to improve children's attitudes toward mathematics
> 4. An increased emphasis on metric units known as the International System of Units, which will be the basis for standard measurement instruction
> 5. An increased emphasis on the total concept of decimal numbers
> 6. An increased emphasis on application and problem-solving skills
> 7. A decreased emphasis on numeration systems other than the familiar decimal-based system
> 8. A decreased emphasis on the computation of fractional numbers in kindergarten through grade six
> 9. A decreased emphasis on set theory."

The teacher demonstrates consistently the ability to:

- correctly explain and model number operations
- correctly explain and model mathematical concepts
- introduce, explain, and model mathematics vocabulary
- develop or adopt a classroom mathematics program with instruction based on individual skill levels
- utilize familiar home, school, and community data to provide meaningful practice of numerical applications for students
- correctly define and model mathematics strands by representation
- adjust instruction so as to move deliberately between concrete, representational and abstract mathematical levels

- provide understandable comparisons in problem-solving skills in mathematics with those in other subject matter areas
- elicit student response to mathematical stimuli both orally and in writing

Using the Skills Lists for Staff Development Needs Assessment

The question of who should decide whether an individual, principal, teacher, or aide has specific needs for improvement is complex and sensitive. It can be avoided by the simple expediency of having each staff member do a personal self-assessment. Clearly, each individual is entitled to a major role in any decision about needed improvement.

In some schools, particularly in districts where building principals are expected to function as instructional leaders, the process of identifying staff development needs involves the principal along with the individual staff members. Often, in such situations, there is no similar process for the principal to receive the benefit of other perspectives regarding the principal's growth needs.

Recent surveys indicate that many teachers place more confidence in fellow teachers than in administrators or other professionals not directly attached to the school site staff. And, professional teacher organizations are inclined to support the point of view that only the individual teacher is capable of ascertaining the ways in which instructional effectiveness may be improved.

Clearly, where a common vocabulary of teaching and learning is established, and where a climate of optimism, trust, and dedication to the improvement of instruction prevails, people within the school setting can assist and facilitate each other in the determination of unmet needs in staff development. "Weary and wary" teachers, impinged upon by a relentless succession of attempts to innovate, to meet new program requirements, are still professional persons who want very much to experience success through the observable growth of their students.

If, then, the innate desire for success is to be harnessed through involvement in a staff development program, collective and collaborative efforts appear to hold the greatest promise. A school staff which agrees that everyone can be better, that learning is a career-long process for all practitioners of instruction, and which devises a process based on good will and trust, can expect over time to improve direct services to students.

This document is non-prescriptive as to how such a process should be developed. The sample forms which follow do provide for multiple "inputs" into individual's needs assessments. Some school staffs may be ready for a multiple input process. Some may need more time and will begin with single input self-assessment by individuals.

It should be noted that the sample forms presented are illustrative and are capable of many variations.

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Generic Teaching Skills

Diagnostic Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Develop and administer or select and administer a previously developed diagnostic tool or survey							Self Peer Principal
Collect, record, analyze and interpret diagnostic data							Self Peer Principal
Recognize in individual learners behaviors indicative of physical, mental, or emotional factors which effect learning							Self Peer Principal
Monitor learner progress during ongoing learning activities							Self Peer Principal
Evaluate learner achievement at the conclusion of a learning activity							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Generic Teaching Skills

Prescriptive Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Provide individual or small/ whole group instruction based on learning needs and interest							Self Peer Principal
Select or create appropriate short and long range objectives for the learners							Self Peer Principal
Develop a sequenced task analysis for short and long range objectives as a basis for instruction							Self Peer Principal
Break down short and long term objectives into sequential and manageable steps (task analysis)							Self Peer Principal
Use selected principles of learning as the basis of instruction							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Generic Teaching Skills

Prescriptive Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly nd expertly	Rated by:
Sequence objectives and learning activities through knowledge, comprehension, application, analysis, synthesis and evaluation levels							Self Peer Principal
Utilize specialized support personnel as appropriate (speech liaison, psychologist)							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Generic Teaching Skills

Classroom Management Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Determine and establish classroom expectations and procedures							Self Peer Principal
Give clear, concise directions							Self Peer Principal
Instruct learners how to attend and follow directions							Self Peer Principal
Monitor and record progress of individual students through an instructional record-keeping system							Self Peer Principal
Plan a series of learning activities so that learners proceed efficiently							Self Peer Principal
Arrange the learning environment to be functional and stimulating							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Generic Teaching Skills

Instructional Materials and Resource Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Select and utilize instructional materials and resources related to a long and short term objective							Self Peer Principal
Select and utilize instructional materials which are at the appropriate developmental level							Self Peer Principal
Select and utilize varied instructional materials which are multi-sensory							Self Peer Principal
Select and utilize relevant instructional materials which appeal to the interests of learners							Self Peer Principal
select, utilize, and integrate multi-ethnic instructional materials into a variety of curriculum areas							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Generic Teaching Skills

Instructional Materials and Resource Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Create appropriate instructional materials							Self Peer Principal
Identify and utilize appropriate resources in the school/community							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Generic Teaching Skills

Human Relations Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Use principles of reinforcement to enhance the self-image of the learners							Self Peer Principal
Provide equal attention and response to each student							Self Peer Principal
Assist learners to find acceptable ways of dealing with their emotions							Self Peer Principal
Express honest, mature emotions							Self Peer Principal
Ameliorate hostility and foster understanding among learners							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Generic Teaching Skills

Human Relations Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Develop positive feelings toward self and others							Self Peer Principal
Value and cultivate appreciation for the unique personal and cultural qualities of individuals							Self Peer Principal
Develop and maintain productive working relationships with school and district staff, parents, and community members							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Skills Associated with Effective Oral Language Instruction

Oral Language Instructional Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Model correct audible speech							Self Peer Principal
Elicit spontaneous speech from students							Self Peer Principal
Elicit paraphrased verbal responses from students when recall or understanding of already presented information is wanted							Self Peer Principal
Use oral language within the range of understanding of students							Self Peer Principal
Elicit, through appropriate questioning, complete verbal expressions based on analysis and synthesis of information and ideas							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Skills Associated with Effective Oral Language Instruction

Oral Language Instructional Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Provide classroom activities in which task-oriented student-student verbal interaction is encouraged							Self Peer Principal
Introduce, explain, and use words which extend students' expressive vocabulary							Self Peer Principal
Refrain from interrupting students' speech patterns when their verbal responses require thoughtful preparation							Self Peer Principal
Accept and use a student's oral language patterns as a basis of instruction							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Skills Associated with Effective Reading Instruction

Reading Instructional Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Identify pre-reading (reading readiness) skills							Self Peer Principal
Identify word analysis skills							Self Peer Principal
Identify vocabulary skills							Self Peer Principal
Identify comprehension skills							Self Peer Principal
Identify skills peculiar to a content area							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Skills Associated with Effective Reading Instruction

Reading Instructional Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Identify speed and flexibility skills							Self Peer Principal
Identify oral reading skills							Self Peer Principal
Perform a complete task analysis to establish a sequence for teaching a given skill or skills							Self Peer Principal
Develop reading continuum based on a sequence of skills							Self Peer Principal
Develop or adopt a classroom reading program with instruction focused on diagnosis of individual students' skill levels							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Skills Associated with Effective Reading Instruction

Reading Instructional Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Successfully assist pupils to read functionally by the transfer, utilization and refinement of reading skills							Self Peer Principal
Assist students in the selection of reading materials which will capture student interest							Self Peer Principal
Model expressive oral reading techniques using materials which will capture student interest							Self Peer Principal
Select stimulating materials for students' use in practicing oral reading							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Skills Associated with Effective Mathematics Instruction

Mathematics Instructional Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Correctly explain and model number operations							Self Peer Principal
Correctly explain and model mathematical concepts							Self Peer Principal
Introduce, explain, and model mathematics vocabulary							Self Peer Principal
Develop or adopt a classroom mathematics program with instruction based on individual skill levels							Self Peer Principal
Utilize familiar home, school, and community data to provide meaningful practice of numerical applications for students							Self Peer Principal

Multiple Input Staff Development
Needs Assessment

Name (optional) _____

Construct a Bar Graph for Each Skill Listed
Use the Scale from Left to Right
Skills Associated with Effective Mathematics Instruction

Mathematics Instructional Skills	0 No knowledge	1 Some knowledge: Don't understand	2 Knowledge OK: Don't know how to use	3 Use sometimes: Could be strengthened	4 Use frequently: Could be improved	5 Use regularly and expertly	Rated by:
Correctly define and model mathematics strands by representation							Self Peer Principal
Adjust instruction so as to move deliberately between concrete, representational and abstract mathematical levels							Self Peer Principal
Provide understandable comparisons in problem-solving skills in mathematics with those in other subject matter areas							Self Peer Principal
Elicit student response to mathematical stimuli both orally and in writing							Self Peer Principal